<u>**Amendment to the Claims**</u>:

The listing of claims will replace all prior versions, and listings of claims in the application:

<u>**Listing of Claims**</u>:

1. (Amended) A receiver for receiving a multi-carrier signal conveying data and reference signals having a first and <u>a</u> second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

a processor for determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals;

a combiner for combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation<u>; and wherein the processor determines the estimation of the reliability of each set of extracted reference signals by a process of calculation and calculates the estimation using adjacent reference signals from each set of extracted reference signals.</u>

2-3. Cancelled (Without disclaimer or prejudice).

4. (Currently Amended) A receiver according to claim 3<u>1</u>, wherein the number of adjacent reference signals used in the calculation is between 1 and 7.

5. (Previously Presented) A receiver according to claim 2, wherein the process of calculation determines the median of a set of extracted reference signals.

6. (Currently Amended) A receiver according to claim ~~2~~1, wherein the process of calculation determines the mean of a set of extracted reference signals.

7. (Previously Presented) A receiver according to claim 1, wherein the combiner applies a weighting to each extracted data signal prior to combining.

8. (Currently Amended) A receiver according to claim ~~2~~1, wherein the combiner combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and ~~for combining~~ combines the first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

9. (Original) A receiver according to claim 8, wherein the first manner of combining is a maximal ratio combining (MRC).

10. (Original) A receiver according to claim 8, wherein the first manner of combining is an equal gain combining (EGC).

11. (Previously Presented) A receiver according to claim 8, wherein the second manner of combining is by signal selection.

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12. (Previously Presented) A receiver according to claim 1, wherein the processor is a filter.

13. (Previously Presented) A receiver according to claim 1, further comprising at least a third diversity branch.

14. (Previously Presented) A receiver according to claim1, wherein the receiver is adapted to receive orthogonal frequency division multiplex (OFDM) signals.

15. (Currently Amended) A method of receiving a multi-carrier signal conveying data and reference signals at a receiver having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals; and

combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation.; and wherein

the step of determining an estimation comprises determining the estimation by a process of calculation and calculates the estimation using adjacent reference signals from each set of extracted reference signals.

16-17. Cancelled (Without disclaimer or prejudice.)

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18. (Currently Amended) A method according to claim ~~17~~15, wherein the step of determining comprises calculating the estimation using between 1 and 7 adjacent reference signals.

19. (Currently Amended) A method according to claim ~~17~~15, wherein the step of determining comprises determining the median of the reference signals.

20. (Currently Amended) A method according to claim ~~17~~15, wherein the step of determining comprises determining the mean of the reference signals.

21. (Previously Presented) A method according to claim 15, further comprising applying a weighting to each extracted data signal prior to combining.

22. (Currently Amended) A method according to claim 15, wherein the step of combining combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and ~~for combining~~ combines the first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

23. (Original) A method according to claim 22, wherein the first manner of combining performs a maximal ratio combining (MRC).

24. (Original) A method according to claim 22, wherein the first manner of combining performs an equal gain combining (EGC).

25. (Previously Presented) A method according to claim 22, wherein the second manner of combining performs a signal selection.

26. (Previously Presented) A method according to claim 15, wherein the step of determining further comprises filtering the extracted reference signals.

27. (Previously Presented) A method according to claim 15, for receiving orthogonal frequency division multiplex (OFDM) signals.

28-29. (Cancelled).

30. (New) A receiver for receiving a multi-carrier signal conveying data and reference signals having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

a processor for determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals;

a combiner for combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the processor determines the estimation of the reliability of each set of extracted reference signals by a process of calculation; and

the process of calculation determines the median of the reference signals.

31. (New) A receiver for receiving a multi-carrier signal conveying data and reference signals having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

a processor for determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals;

a combiner for combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the processor determines the estimation of the reliability of each set of extracted reference signals by a process of calculation; and

the process of calculation determines the mean of the reference signals.

32. (New) A receiver for receiving a multi-carrier signal conveying data and reference signals having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

a processor for determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals; and

a combiner for combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the combiner combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and for combining the first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

33. (New) A receiver according to claim 32, wherein:

the first manner of combining is a maximal ratio combining (MRC).

34. (New) A receiver according to claim 32, wherein:

the first manner of combining is an equal gain combining (EGC).

35. (New) A receiver according to claim 32, wherein:

the second manner of combining is by signal selection.

36. (New) A method of receiving a multi-carrier signal conveying data and reference signals at a receiver having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals; and

combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the step of determining an estimation comprises determining the estimation by a process of calculation, using adjacent reference signals from each set of between 1 and 7 adjacent extracted reference signals, and determining the median of the reference signals.

37. (New) A method of receiving a multi-carrier signal conveying data and reference signals at a receiver having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals; and

combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the step of determining an estimation comprises determining the estimation by a process of calculation, using adjacent reference signals from each set of between 1 and 7 adjacent extracted reference signals, and determining the median of the reference signals.

38. (New) A method of receiving a multi-carrier signal conveying data and reference signals at a receiver having a first and a second diversity branch each operable to extract the data and reference signals from the multi-carrier signal, thereby producing a first and second set of extracted data and reference signals, comprising:

determining an estimation of the reliability of an extracted reference signal from each set of extracted reference signals; and

combining a data signal from the first and second set of extracted data signals in accordance with the determined estimation; and wherein

the step of combining combines the first and second set of extracted data signals in a first manner when the difference between the determined reliability of each set of reference signals is above a predetermined threshold, and combines the first and second set of extracted data signals in a second manner when the determined reliability difference of each set of reference signals is below the predetermined threshold.

39. (New) A method according to claim 38, wherein:
the first manner of combining performs a maximal ratio combining (MRC).

40. (New) A method according to claim 38, wherein:
the first manner of combining performs an equal gain combining (EGC).

41. (New) A method according to claim 38, wherein:

the second manner of combining performs a signal selection.

42. (New) A method according to claim 38, wherein:

the step of determining further comprises filtering the extracted reference

signals.

43. (New) A method according to claim 38, comprising:

receiving orthogonal frequency division multiplex (OFDM) signals.